313 camels. The difficulty is being got over to some extent by experiments in
333 making reinforced-concrete pillars, of which we saw two in construction at
353 Seyyun. All the work is done by local labour, the travelled Seyyids training their masons. The interior walls of these houses, apart from elaborate decorations such as gold crowns and coloured flowers, consist of a lime plaster polished by smooth pieces of flint till it resembles marble.

861 Shibam is remarkable for the height of its houses. The town, which is in
942 the shape of a capital D, contains in a small area five hundred houses built on
485 a slight eminence in the wadi. From a short distance the whole town appears
625 to be one enormous brown mud-built construction with a whitewashed top storey and roof. There is no further building room in the town, and the only way to have a new house is to buy an old one, knock it down, and rebuild.
344 The area of land required to build a house 45 *dhirras* in width by 35 in depth (a *dhirra*, or cubit, equals 1·5 foot) will cost 10,000 dollars, and having acquired the land the prospective builder will have to submit the specifications of his house for the approval of a committee of the townspeople who consider the position of windows and of gutters carrying water to the street. Subsequent alterations to a house must also be similarly approved. By general consent houses in Shibam are not now to be built more than six storeys high, in order to avoid overlooking. The only important existing exception to this rule is the Government palace, which is a storey or two higher but which is in such a position that it overlooks very little. On the top of the six storeys the builder may however erect a roofless seventh which gives him a walled-in roof terrace. The building of this house, which, when completed, will be 64 *dhirras* or 96 feet high, will cost more than 20,000 dollars.

333 The foundations are dug 2 *dhirras* deep below the surface of the earth and
342 3 *dhirras* wide. Stones are used for the foundation mortared together with a mixture of wood ash and lime. In places where there is any doubt as to the solidity of the ground on which the house is to stand long pieces of *'elb* wood are laid in pairs lengthwise in the foundations. Wood for this purpose must be cut in the winter; if this is done it is said never to rot. The stone foundation or *sās* is continued for 2 *dhirras* above the level of the ground. When the building operations have reached this stage a foundation sacrifice of a goat or sheep is made on the walls. The house is centred round a solid pillar built on the same foundation as the walls. For a house of the dimensions proposed this pillar or *'arus el beit* will be $3\frac{1}{2}$ by 3 *dhirras* wide and of the same thickness from top to bottom. The stairs of the house invariably go up round the *'arus*. The bricks are made of clay mixed with straw, the standard size being $1\frac{1}{4}$ *dhirras* in length by $\frac{1}{2}$ in breadth by 4 *banan* or fingers' widths in thickness. When the clay of the required consistency and thickness for making the bricks has been laid out they are cut out by a wooden frame which makes two bricks [435] at a time. The bricks cost five dollars a thousand.

The thickness of the walls of the first storey is $1\frac{7}{8}$ *dhirras*, of the second $1\frac{1}{2}$, of the third $1\frac{1}{4}$, of the fourth 1 *dhirra*, of the fifth $\frac{3}{4}$, of the sixth $\frac{5}{8}$, and of the seventh $\frac{1}{2}$ a *dhirra*. The bricks are mortared together with wet clay. As *'elb* wood grows to no great length the size of the room is determined to some [435] extent by the length of the pieces available as girders. The girders are usually very short and supported by carved pillars each costing about twenty dollars.

133

FIG. 5—Sufyan, looking eastward to the Wadi Mukhtarana toward Shiloah (see Fig. 6). The large white building with a dark roof in the foreground at the southeast with swimming pool shown in Figure 10. The magnificent palace of the Sultan (Fig. 8) is below and to the right of the rocky promontory against which the town lies. The upper right-hand margin of the photograph shows the dissected plateau in the direction of the Rab' al Khali desert about 100 miles to the north.

• 344

FIG. 6—Palace of the Sultan in Sufyan. This beautiful building dominates the modern plaza and is among the most picturesque to be found in the Mediterranean.

P. 636

34:Meulen and Wissmann T-9 (1931)1932 M042 Hadhramaut M042

387 is only a narrow one, is broken in some places by breaches
186 through which at high tide the sea water streams. These gaps
487 have doubtless been made by the rainfall from the mountains farther inland seaking an outlet to the sea. Close by esh-Shiḥr coral rocks jut out above the level of the sand, and the passage there is narrow and vanishes completely when the tide is at flood.

361 Esh-Shiḥr lies on a wide flat sea coast, which slopes only very gradually so that steamers have to anchor far out at sea. At the moment several sambooks are lying there and fishermen are plying their trade till far away to the horizon. The track runs through deep, loose sand from the beach to the gate, which is new, but lacking in taste architecturally. The wall is also new and is strengthened on the inner side with buttresses of mud bricks, but the garment is too large for what it has to cover, and a half-dead town is pining away within the walls. Many blocks of houses are uninhabited, some have even fallen in. One crosses great open spaces on the way from the west to the east gate. The streets are dirty and even the inhabited houses have a neglected look. Over the whole town, and stronger even than the sewage smell of the streets, hangs
● 314 the stench of drying, half-decayed fish. The Government
361 buildings are in a square situated in the western part of the
346 town. The castle stands on a sandy eminence by the sea; the building has just been restored and, with its simple, strong lines makes a good impression. The bottom floor is being used temporarily as a school for three to four hundred boys. On the hill near the fortress some old, big cannon are lying, and a solitary signal-mast stands there. The Governor's house, a large, tall, well-constructed building, whose many roof-terraces are well suited to the sweltering, damp climate of esh-Shiḥr, stands on the land side of the square. The Governor is not at home, for we have met him on the beach in his fine, American motor-car. He looks Indian, and too modern for his town, nearly cut off as it is from the outside world and still dreaming of former glories. At one time, esh-Shiḥr was larger

24:Meulen and Wiesmann T-3 (1931)932 MM2 Hadhramaut MM2

than Makalla and was, indeed, an important trading centre before that city even existed.[1]

Under the east wall there is a large open plain, over which the cemetery extends, with some *qubbas*[2] and many mosques at the edge of it. Sayyid Abū Bakr el-Kāf of Terim has, close to it, a large piece of ground, where he has built a palatial guest-house for relations and friends travelling to and fro between Java and Terim via esh-Shiḥr. El-Kāf is busy constructing a motor road from Terim to esh-Shiḥr, which is complete but for the last stretch as far as the coast, a matter of three days by camel. If this junction can be effected, in spite of the aversion to it of the warlike Ḥumūmi Bedouins, through whose territory it passes for the greater part, then perhaps esh-Shiḥr will grow again to fit into her walls.

Before we left the town we made another call on the Governor in charge, who, with the help of the tax-farmer, a well-educated Indian, gave us a hearty, friendly reception. We were conducted past a strong guard of soldiers to an old-fashioned *madjlis*, where the shutters of the windows and the wooden supporting pillars were beautifully carved, and the ceiling painted white, red and black. With grateful relish we partook of tea and a great variety of sweets and of fresh and tinned fruits.

The population of esh-Shiḥr is officially estimated at 9000. It did not seem to us that it could be more than 6000. Yet, as the Westerner does not get to know how densely peopled the big Arabian houses are, our calculations remain fairly uncertain. The town has 36 mosques.

We were compelled to beat a hasty retreat before the rising tide. For safety's sake we were given an extra Ford car and some soldiers. The coral rocks were still just passable, but we stuck in the bed of the wādī. Finally, after much delay and much fruitless exertion, we got free, but there was no time left for the promised meal with our host of Sheḥēr, who

[1] Cf. *Encyclopaedia of Islam*, art. *al-Shiḥr*.

[2] *Qubba* (قبة), is a dome, a cupola, or a cupola-shaped building.